

Soil erosion contributes significantly to global carbon emissions

1 June 2015

Soil erosion that occurs in rainy seasons leads to a significant amount of carbon being released into the atmosphere, a new study shows.

Investigators who analyzed 240 runoff plots from different regions of the world found that [organic carbon](#) losses from soils corresponds to about one-sixth of annual fossil fuel-induced [carbon emissions](#) with highest rates for semi-arid soils followed by tropical soils and temperate soils.

"The organic carbon lost from soils is more likely to reach the atmosphere under semi-arid sandy soils of weak structure compared to clayey tropical or temperate soils where organic matter is more protected," said Dr. Vincent Chaplot, co-author of the study published in *Earth Surface Processes and Landforms*.

More information: *Earth Surface Processes and Landforms*, [DOI: 10.1002/esp.3758](https://doi.org/10.1002/esp.3758)

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